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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/212,292	12/16/1998	SUNG-GON JUN	P55281	8641

7590 03/27/2003
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WASHINGTON, DC 200051202

EXAMINER

ZAMANI, ALI A

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 03/27/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/212,292

Applicant(s)

JUN, SUNG-GON

Examiner

Ali A. Zamani

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

The indicated allowability of claim 2 is withdrawn in view of the newly discovered reference(Sawada) to . Rejections based on the newly cited reference(Sawada) follow.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozolins (US Pat. No. 5,990,858).

3. In regard to claims 1 and 9-10, Ozolins discloses a flat panel display apparatus for receiving display information including video data (40), a receiver (20) receives input signals originating from the graphic controller and output signals to analog LCD panel (30), a PLL (90), a brightness controller (100) a micro processor (80), an output terminal for externally transferring synchronizing signal and analog video signal to an analog display (see Fig. 1). Ozolins teaches analog LCDs that are capable of utilizing analog RGB signals have been introduced to the market

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recently, although such analog LCDs do not require ADCs (see col. 1, lines 63-67 and col. 2, lines 1-6). Thus it would have been obvious to one of ordinary skill in the art at the time of invention to remove the phase-locked loop (90) as configured in Fig. 1 which is used generate clock pulses linked with analog LCD panel (30) (see col. 5, lines 1-7). One would have been motivated in view of Ozolins that a flat display panel (10) minus PLL (90) is functionally equivalent to the desired exclusion of PLL.

Claim Rejections - 35 USC § 103

4. Claim 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozolins in view of Rokunohe et al. (US Pat. No. 4,549,175).

In regard to claim 3-8, Ozolins is discussed above. Ozolins substantially shows the above claimed limitations except for a "deflection signal generator". However, Rockunohe disclose an image transmission apparatus includes a synchronizing signal generator (17), for generating horizontal and vertical synchronizing signal, an deflection signal generator (62), a luminescent signal generator (63), a video amplifier (64). Rockunohe is cited to show the concept of using a deflection signal generator (62) for receiving synchronizing signal output from synchronizing signal generator (17) via output terminal and for generating deflection signal is old. Thus, it would have been obvious to one of ordinary skill in the art to utilize the signal deflection of Rockunohe in the display device of Ozolins to provide a flat panel display with

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means for connecting to an analog display, which make a convenient presentation to many people.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ozolins in view of Sawada (US Pat. No. 6,078,317).

In regard to claim 2, Ozolins is discussed above. Ozolins substantially teach the above claimed limitations except for a "signal generator". However, Sawada teaches a display apparatus for displaying an image by receiving an RGB video signal including an image signal and a display mode detector (15) receives vertical and horizontal synchronizing signals in the computer sync from e.g., the computer (100) as in the input terminal (11). Furthermore, the video and synchronizing signals output from the computer (100) are input to and processed by the display interface (1) and then an image is displayed on the display unit (4) and . Thus, it would have been obvious to one of ordinary skill in the art to utilize the SYNC generator (100) of Sawada in the

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display of Ozolins to provide a display device which can perform display an image in both the VGA and SVGA modes without using a PLL circuit for signal conversion.

“ A flat panel display apparatus for receiving display information including video data synchronizing data from a host processing digital data in a serial digital communication, said display apparatus adapted for operation without need for any analog-to-digital converter (ADC) or phase-locked loop (PLL) circuit for signal conversion, said display apparatus comprising: a receiver for reconstructing said display information; a synchronizing signal generator for generating a synchronizing signal by extracting the synchronizing data from said reconstructed display information; a digital-to-analog converter for converting said video data to a corresponding analog video signal ; an output terminal for externally transferring said synchronizing signal and analog video to an analog display apparatus; and a video data converter for converting line and dot numbers of said video data converter for converting line and dot numbers of said video data so as to correspond to a prescribed display mode when said synchronizing data has a different characteristic from said prescribed display mode.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Zamani whose telephone number is (703) 308-6414. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 5:00 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerepe, can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ali Zamani

March 20, 2003



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600